CCS Technical Documentation
RH-17 Series Transceivers

Service Tools

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Service Tools

2280

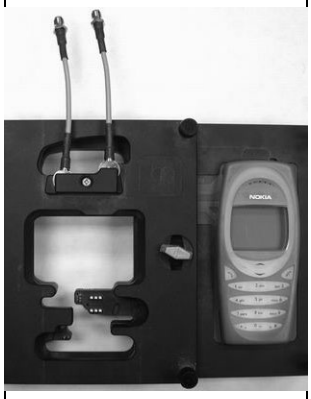
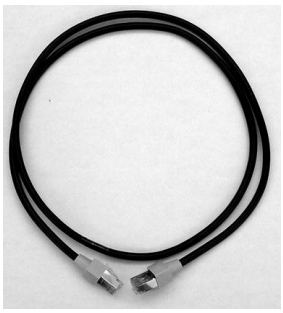
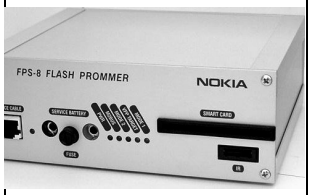
Photo	Code	Service Tool	Code	Description Info
	MJS-82	Service Jig	0770474	MJS-82 secures and allows easy access to critical areas of the handset's PWB during troubleshooting. It supports regulated and unregulated DC input voltages, Local and Normal mode operations, headset jack for audio tests, R-UIM card reader, second DC input for VCHAR used in EM tuning. This jig also supports simultaneous RF connections to the CDMA and GPS engines. A completely functional UI module is provided on the right side.
	PCS-1	DC Cable	0730012	The Power Cable PCS-1 is used to connect the service tools (JBV-1, MJS-57) to an external power supply.
	XCS-4	Service Cable	0730178	The XCS-4 Service Cable is a modular cable for flashing DCT4 products.

Photo	Code	Service Tool	Code	Description Info
	RJ-13	Rework Jig	0770574	This tool serves as a mechanical PWB holder for desoldering and soldering of components. This tool is NOT intended to serve as a test jig.
	MJF-28	Docking Station Adapter	0770484	This device works in conjunction with JBV-1 Docking Station and the FPS-8 Prommer Box to allow calibration, tuning, and/or software flashing of the handset. It supports the LYNX battery interface, which does not require BTEMP. It also has a built-in R-UIM card reader. The MJF device is used in AMS repair centers for flashing and tuning. It is also useful in R&D labs during product development and True Testing.
	CA-5S	DC Service Cable	0730283	**CA-5S is** used for EM calibration with the JBV-1. The cable replaces the SCB-3 DC Cable (0730114).
	FLA-44	Flash Loading Adapter	0770483	This accessory replaces the phone battery and allows the service SW to communicate with the handset for flashing and other POS functions using the FLS-4S device setup. The device can also be powered by an external P/S (3.9-4.5 VDC...DO NOT exceed 4.5.VDC). Pins (0770450) are replaceable as long as they do not get stuck inside the PIN tower.

Photo	Code	Service Tool	Code	Description Info
	SKT-3	Test A-Cover	0770541	The SKT-3 A-cover allows the technician to replace the handset's original A-cover with one that provides access to the CDMA and GPS RF connectors. The test A-cover is best suited for test cases where UI (keypad + LCD) functionality is required. SKT-3 only supports the XRS-4 RF test cable.
	XRS-4	RF Test Cable	0730221	Use with the SKT-3 A-cover.
	SA-9	RF Support	0770564	The RF Support and Spring-loaded RF Cable solution is an alternative to the Test A-cover (SKT-3). It is best suited to test cases where UI functionality is not required and repetitive tests are needed (e.g., tuning and calibrating multiple phones). This setup takes advantage of the holes provided in the UI light guide for RF connections. The A-cover must be removed when using this tool.
	CA-8RS	RF Test Cable	0730299	The RF Support and Spring-loaded RF Cable solution is an alternative to the Test A-cover (SKT-3). It is best suited to test cases where UI functionality is not required and repetitive tests are needed (e.g., tuning and calibrating multiple phones). This setup takes advantage of the holes provided in the UI light guide for RF connections. The A-cover must be removed when using this tool.

Photo	Code	Service Tool	Code	Description Info
	JBV-1	Docking Station	0770298	The Docking Station and the Docking Station Adapter are needed for Mbus, Fbus, RF, and audio connections. This setup allows connection between flash prommers. When the audio box is connected, it has to be connected to the phone's audio connector. The Docking Station can be powered by FPS-8 or external power supply.
	FPS-8	Prommer Box	0080321	The Flash Prommer FPS-8 is used for heavy flash.
	JXS-1	Shield Box	N/A	Developed by and used by the Americas AMS group.
	PKD-1XX	SW Protection Key (dongles)	0750018 (PDK-1)	Allows Nokia Service SW (e.g., Phoenix, Diego) to function and perform specific features. Not for use outside of Nokia facilities.

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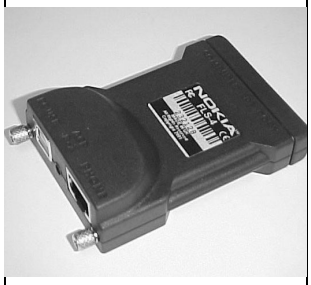
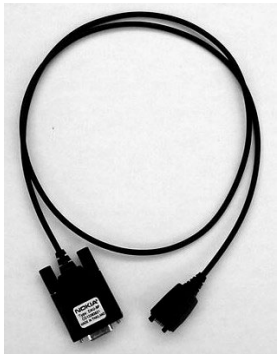
	FLS-4S	POS Flash Adapter	0080543	The Point of Sale (POS) flash is a low-cost software upgrade tool. This requires the XCS-1 cable and ACP-8U for operation.
	DAU-9T	FBUS Cable	0730267	The FBUS cable DAU-9T provides a connection from the serial port of the computer to the system connector of the phone.
	DAU-9S	Service Cable	0720167	This general-purpose cable supports F/M-BUS communication between a Mod-10 device and a PC.
	DKU-5F	Flash Cable	0730281	The flash adapter allows FBUS connections over USB pop port when using Spirent UPST for flashing. *Note: The cable cannot be used as a straight-through USB connection cable.*

Flashing and Testing Setups

Service Case #1

This setup is best suited for Point of Sale (POS) locations using Diego Service Software. The picture below shows the FLA-44 device attached to the handset. Power is provided to the FLA-44 by the FLA-4S flashing device, which in turn is powered by an external power supply. The FLS-4S device connects to the parallel port of the PC running the Diego application.

Service Case #2

This setup illustrates an MJF-28 with a Haukka handset together with a Test A-cover and two XRS-4 RF test cables. This application could be used during testing and/or trouble-shooting where the UI functionality of the handset is required for such tests.

For repetitive tests, the SA-9 and RF cable solution configuration (Service Case #3) is a better solution since it eliminates the time it takes to place the Test A-cover.

Service Case #3

This configuration shows an MJF-28 with a Haukka handset and two SA-9 RF supports plus two CA-8RS RF test cables. This application could be used during RF calibration, and for CE and GPS testing.

This is an easy and secure method of performing the same tests the Test A-cover solution provides, but it is best suited for repetitive testing.

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Service Case #4

This setup illustrates the MJS-82 with XRS-4 RF test cables, connected to an FPS-8 prommer box. This setup allows troubleshooting and flashing of the engine at the same time.

The jig also could be connected directly to the PC running Phoenix, using the general purpose DAU-9S cable.